Fig.1

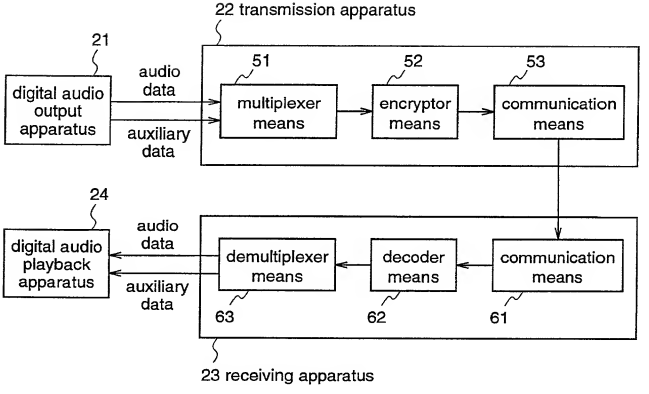
22 transmission apparatus
21
digital audio output apparatus
audio data
auxiliary data
51
multiplexer means
52
encryptor means
53
communication means
24
digital audio playback apparatus
audio data
auxiliary data
demultiplexer means
decoder means
communication means
63
62
61
23 receiving apparatus

Fig.2

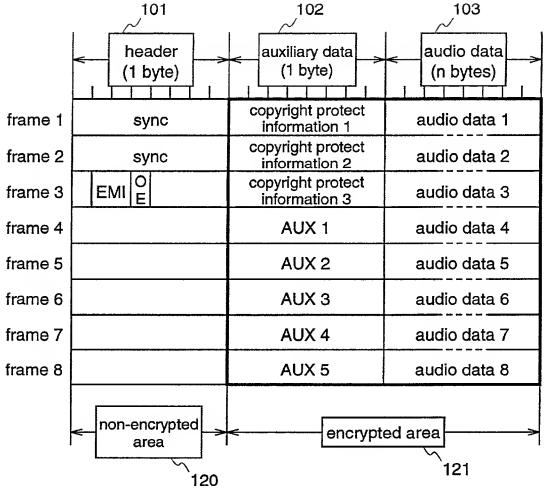

Fig.3

	Data contents	Number of bits
copyright protect information 1 (copy control information)	copy permission information	2
	copy times information	3
	copy quality information	2
	audio transaction information	1
copyright protect information 2 (ISRC information)	ISRC status information	3
	ISRC number information	5
copyright protect information 3 (ISRC information)	ISRC data information	8

Fig.4

	Data contents	Number of bits
AUX 1	quantization word length 1	4
	quantization word length 2	4
AUX 2	sampling frequency 1	4
	sampling frequency 2	4
AUX 3	channel assignment information	5
	Reserved	3
AUX 4	Reserved	8
AUX 5	Reserved	8

Fig.5

	CH1	CH2	CH3	CH4	CH5	CH6
00000	C					
00001	L	R				
00010	Lf	Rf	S			
00011	Lf	Rf	Ls	Rs		
00100	Lf	Rf	Lfe			
00101	Lf	Rf	Lfe	S		
00110	Lf	Rf	Lfe	Ls	Rs	
00111	Lf	Rf	C			
01000	Lf	Rf	C	S		
01001	Lf	Rf	C	Ls	Rs	
01010	Lf	Rf	C	Lfe		
01011	Lf	Rf	C	Lfe	S	
01100	Lf	Rf	C	Lfe	Ls	Rs
01101	Lf	Rf	C	S		
01110	Lf	Rf	C	Ls	Rs	
01111	Lf	Rf	C	Lfe		
10000	Lf	Rf	C	Lfe	S	
10001	Lf	Rf	C	Lfe	Ls	Rs
10010	Lf	Rf	Ls	Rs	Lfe	
10011	Lf	Rf	Ls	Rs	C	
10100	Lf	Rf	Ls	Rs	C	Lfe
	Channel group 1				Channel group 2	

Fig.6

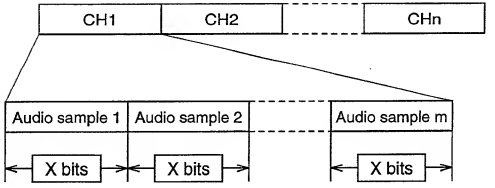

Fig.7 (a)

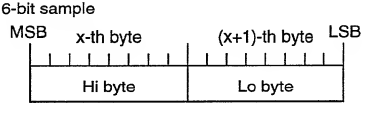

Fig.7 (b)

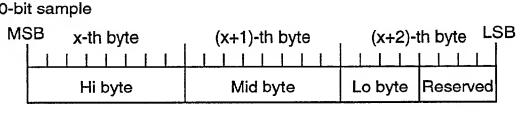

Fig.7 (c)

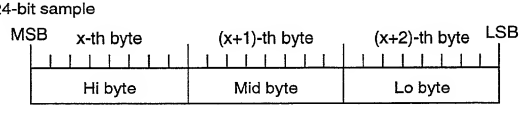

Fig.8

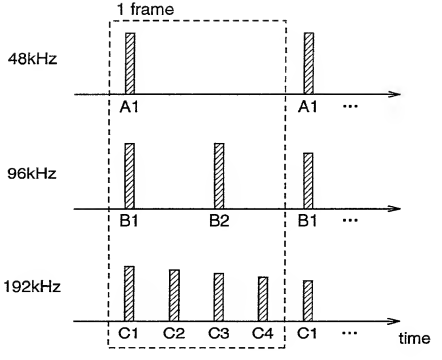

Fig.9

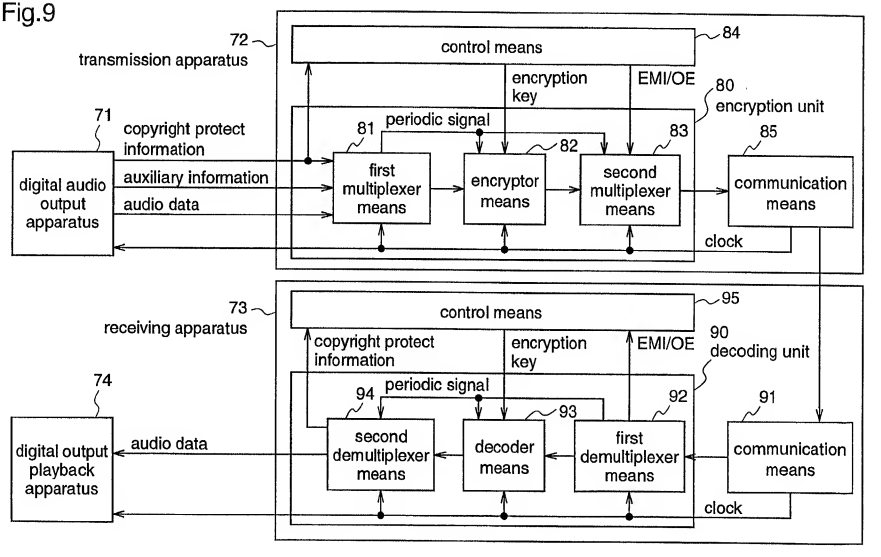
72
transmission apparatus
control means
84
encryption key
EMI/OE
80
encryption unit
71
copyright protect information
81
periodic signal
83
85
digital audio output apparatus
auxiliary information
audio data
first multiplexer means
82
encryptor means
second multiplexer means
communication means
clock
73
receiving apparatus
control means
95
copyright protect information
encryption key
EMI/OE
90
decoding unit
74
94
periodic signal
93
92
91
digital output playback apparatus
audio data
second demultiplexer means
decoder means
first demultiplexer means
communication means
clock

Fig.10

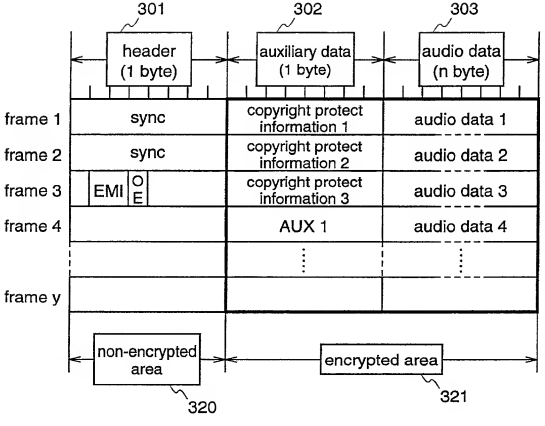
301
302
303
header (1 byte)
auxiliary data (1 byte)
audio data (n byte)
frame 1
sync
copyright protect information 1
audio data 1
frame 2
sync
copyright protect information 2
audio data 2
frame 3
EMI
O E
copyright protect information 3
audio data 3
frame 4
AUX 1
audio data 4
frame y
non-encrypted area
encrypted area
320
321

Fig.11 (a)

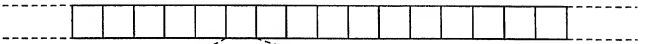

Fig.11 (b)

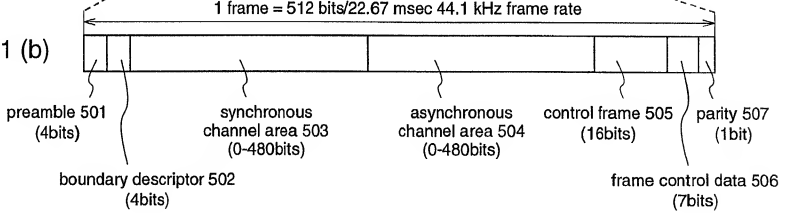
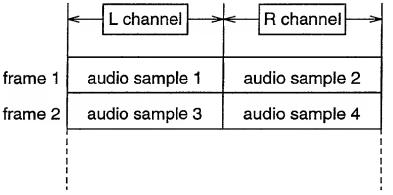
Fig.12 Prior Art